Woods Lake Recreation Area Access Project

Proposed Action (Alternative 1):

The Amador District Ranger proposes to remove the existing culvert over the east fork of Woods Lake Creek and replace it with a bridge. The project area encompasses approximately 200 ft. of the east fork of Woods Lake Creek. The project is located just south of the junction of Alpine County Road 122 (CR122) and Eldorado National Forest road 10N01 at the culvert crossing of a tributary to Woods Lake Creek on the FS access road to the Woods Lake recreation area (T10N, R18E, Section 28; M.D.V. & M.) within the Amador Ranger District, Eldorado National Forest, California.

The following activities are proposed to meet the needs and achieve the purposes for the Woods Lake Recreation Area Access project:

Public Safety during project activities:

- Provide signs, barricades, and traffic control at the existing road and culvert to allow temporary public use of during project implementation.

Bridge Construction and Installation:

- Bridge design would provide greater stability than a culvert, and not cost substantially more money than a culvert design. Application of BMPs and FHWA-FP03 specifications would be required in the contract for construction.
- Bridge abutment design determined site-specific characteristics for the bridge abutment design.
- During foundation excavation and casting of the concrete abutment structures, the stream flow would be fully contained within a temporary culvert, and seepage water would be pumped to an upland area if needed.
- Install a single span precast concrete slab bridge that is sixteen feet wide by thirty feet long with an asphalt wearing surface with 15 inch high curbs on each side over the east fork of Woods Lake Creek. The abutments will be cast-in-place concrete on spread footings.
- The proposed bridge is capable of passing the 100-year flood with two foot of freeboard to allow for sediment and debris. The new bridge would allow unobstructed passage for aquatic organisms.
- Installation for pre-fabricated bridge decks would use a crane.
- The bridge would be installed a few yards downstream from the existing culvert crossing location.
- Stabilize the stream banks through the crossing area and protect the bridge abutments using rip-rap rock. Up to 75 feet of streambanks both upstream and downstream of the proposed bridge location would be lined with riprap.

Road Re-alignment:

- Re-align the asphalt intersection of Woods Lake Recreation Area access road with Alpine County road (ALP-122) and FS road 10N01to make a turnoff that is more open than a 90-degree angle.
- Re-grade ALP-122 to slope away from Woods Lake Creek, with an inside drainage ditch of approximately 200 ft. to carry road runoff away from the creek, connect with the existing drainage ditch on road 10N01, and disperse road runoff into the wetland or adjacent forest.

Culvert Removal and Site Rehabilitation:

- Remove the existing failing and eroded culvert.
- The road approaches to the culvert would be removed and ripped.
- Stream banks in the culvert removal area (approximately 70 ft.) would be reshaped to match the stream banks outside the culvert influence.
- Boulders of sufficient size would be placed in the revegetated area alongside ALP-122 and 10N01 to prevent parking on the area between the road and the stream.
- The Revegetation Plan for the site (Appendix A) would include:
    - Willow clumps in the path of the new road & bridge would be pruned to provide cuttings for re-vegetation; then the root balls would be lifted, wrapped in burlap, and re-planted in the area where the culvert and road are removed.
    - Rehabilitate the site using willow cuttings placed to stabilize the stream banks where erosion from ALP-122 is occurring, in the culvert removal area, and between rip-rap rocks.
    - The areas of road removal and erosion would be re-seeded with a native seed mixture recommended by the IDTeam botanist.

Monitoring:

- All protocols for BMP monitoring would be followed for road and stream crossing BMPs, during and post construction.
- Water quality monitoring of the turbidity of the East Fork of Woods Lake Creek during construction activities (described in detail in Appendix B).
- The Eldorado National Forest Noxious Weed program is expected to continue monitoring and managing noxious weed infestations, and would take necessary actions to address new noxious weed infestations if they are discovered in the project area.
- For the first season after planting, restoration areas will be monitored for revegetation effectiveness and plant survival. See Appendix A for details.

Design Criteria

Visual Resources

The bridge would conform to Forest Service visual objective criteria for development of the Woods Lake Recreation Area, and blend with the level of improvements and facilities at the site.

Recreation Resources

Limit work to week days to reduce congestion and noise during peak usage at recreation facilities.

Hydrology and Aquatic Resources

Aquatic features in the project area were evaluated in the field by an interdisciplinary team. The project record contains the Riparian Conservation Objective analysis report.

- During construction activities, most of the flow of the East Fork of Woods Creek would be diverted through a temporary culvert placed in the stream channel. The temporary culvert would be removed after construction activities are completed.
- During construction activities, groundwater in the stream channel near the bridge abutments would be pumped out of the channel
- Bridge abutments, as well as up to 75 feet of the streambanks both upstream and downstream of the proposed bridge location, would be lined with riprap to prevent the east fork of Woods Lake Creek from cutting through a meander in the stream and by-passing the proposed bridge location and reduce erosion of the stream channel in the project area.
- Bridge has been designed to pass the flow and debris from a 100-year flow event.
- A segment of road ALP-122 will be re-shaped so that runoff and sediment from the road no longer flows into the East Fork of Woods Creek.
- After the culvert underneath road 10N01at its crossing with East Fork Woods Creek and the associated segment of the road is removed, the streambanks would be reshaped to match the streambanks immediately upstream and downstream. The reshaped streambanks will be covered with riprap.

Soil Resources

- The Pacific Southwest Region "Water Quality Management for Forest System Lands in California, Best Management Practices" (BMPs) would be applied to protect the soils from eroding both during construction and during the recovery period.
- Federal Highway Administration (FHWA) FP-03 handbook (cited above) standards would also apply to protect soil quality.
- Effective ground cover at the conclusion of the project would be at least 70 percent in RCAs.
- Application of BMPs and FHWA-FP03 specifications would be required in the contract for construction.

Terrestrial Wildlife

- Should any TES species be located during project implementation, the district biologist would be informed, and appropriate mitigation measures taken to protect TES species.
- Retain trees and vegetation where it does not conflict with the repairs and human safety to provide or enhance habitat and minimize impacts to migratory land birds.

Sensitive or Invasive Plant Species and Noxious Weeds

- All equipment used for the project will be cleaned prior to arriving at Woods Lake to ensure it is free of soil, seeds, vegetative matter or other debris prior to entering the project area.
- Only native seed mixes and/or certified weed free straw (preferably certified rice straw) will be used (ENF Seed and Mulch Rx 2000).
- Sand, gravel, fill material, and bounders used within the project area would come from weed-free sources. Consult with the Forests Botanist for sources of weed-free material.
- If any new noxious weeds, Special Interest, or Sensitive plants are found in the project area, the ENF botanist will be notified immediately and appropriate mitigation measures will be applied.
- Surveys for sensitive plant occurrences in the project area found no sensitive plant occurrences. If any previously undocumented sensitive plant occurrences are found during project implementation, they would be flagged for avoidance where practicable.

Heritage

- A site survey completed in 2011 found no cultural resources within the project area, as documented in the cultural and heritage resource report (project record, Whiteman, 2011). If any previously undocumented cultural resources are encountered during project operations, all work would cease immediately in that area until the District Archaeologist can inspect the area, document the resource, and provide appropriate protective measures.

Air Quality

- Water would be used on native surface roads to maintain surface fines, minimize dust, and maintain surface compaction.

No Action (Alternative 2):

The existing culvert crossing of the east fork of Woods Lake Creek would remain in place and continue to degrade, the approach would remain as a narrower than 90-degree turn, and Alpine County road 122 would continue sloping toward the stream and contributing sediment to the stream.